

GEOLOGIC CRITERIA CONSIDERED IN DETERMINATION OF COLLAPSE AND/OR REGIONAL
GROUNDWATER POLLUTION POTENTIAL

- *A) History of previous collapse in area
- *B) Losing stream
- c) Karst
- D) Soil, bedrock, groundwater and landform criteria

Site: Syntex-Verona
ID #: MD0007452154
Break: 178
Other: No date

1) Soil

- *a) relict structure preserved from parent bedrock
- b) 30-100 feet of soil
- c) clay fraction MH
- d) moderate to high permeability
- *e) floodplain deposits colluvial rather than alluvial

2) Bedrock

- a) pinnacled
- *b) cave systems developed especially near soil-bedrock contact
- c) false fronts

3) Groundwater

- a) depth to perennial water table 100-250 feet
- b) depth to seasonal high water table 30 feet
- *c) area of groundwater recharge
- d) springs

4) Landform criteria

- a) Proximity to escarpment (hydraulic gradient)
- *b) poorly defined stream channel
- *c) floodplain profile gentle to almost flat
- d) few if any terraces
- e) little if any colluvial deposits on lower slopes
- f) valley widths narrowing abruptly (shut in)
- g) concave upward slopes
- *h) angular cross section profile of valley



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SUPERFUND RECORDS

Not all of these criteria necessarily exist at any one site. Those having most persistent occurrences are shown with an asterisk.

The lagoons inspected will be ranked into three categories based on surficial geologic evidence of probable danger of collapse and regional groundwater pollution.

Category 1 - serious - Regional Groundwater Pollution
Category 2 - moderate - focal groundwater pollution
Category 3 - slight - minor

Handwritten signatures and notes:
1/10/11
Gail & Paul Long
Rolla, MO

Handwritten notes at the top right, possibly including a signature and the date 11/11/11.

RCRA

Well water samples

2 weeks on

5
tomorrow

Palinich
Geological

Warrent Fan /

Warrent

Warrent - Public

Environmental Engineers

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